

IN THE CLAIMS:

Please amend claims 3-10, 15-19, 23-24, 26-27, 30-32 and 34, and add new claims 35-44 as follows.

1. (Original) A method for processing service requests in a domain of a network, wherein the network comprises a plurality of domains, wherein said service requests originate from a user terminal associated with a service node of said domain, and wherein at least one domain of said plurality of domains comprises at least a service request input node, an intermediate node, a database, an entry node, and a plurality of service nodes, and wherein said service request input node is connected to said intermediate node, to said entry node and to said service nodes, said intermediate node is further connected to said database and to said service nodes, and said service nodes are further connected to each other; said method comprising:

analyzing an incoming service request in a service request input node in terms of destination information contained in a service request;

determining in said service request input node, whether the destination information enables a direct forwarding of said service request to a destination;

redirecting said service request by said service request input node, if said determining determines that said direct forwarding is not enabled; wherein said redirecting comprises

transmitting a received service request by said service request input node to an intermediate node;

based on said received service request, performing a look-up in a database by said intermediate node for obtaining destination information required to enable a forwarding of said service request to said destination;

sending said destination information from said intermediate node to said service request input node; and

based on said sent destination information, forwarding said service request from said service request input node to said destination.

2. (Original) A method according to claim 1, further comprising:

direct forwarding said service request by said service request input node to said destination, if said determining determines that said direct forwarding is enabled.

3. (Currently Amended) A method according to claim 1, wherein said ~~step of~~ analyzing comprises analyzing said incoming service request in said service request input node comprising an entry node of said domain, and wherein an entry node receives said service request from outside of said domain.

4. (Currently Amended) A method according to claim 1, wherein said ~~step of~~ analyzing comprises analyzing said incoming service request in said service request input node comprising a service node of a plurality of service nodes of said domain, with which a user terminal originating said service request is not associated, wherein said one of the plurality of service nodes receives said service request from within said domain.

5. (Currently Amended) A method according to claim 4, wherein said ~~step of~~ determining comprises determining in said service request input node that the received service request from within said domain is destined for a user terminal associated with said service node of said plurality of service nodes of said domain, and in response redirects said service request.

6. (Currently Amended) A method according to claim 4, wherein said ~~step of~~ determining comprises determining in said service request input node that the received service request from within said domain is destined for a user terminal not associated with said service node of said plurality of service nodes of said domain, and forwards said service request to said entry node of said domain for relaying said service request to another domain.

7. (Currently Amended) A method according to claim 1, wherein said ~~step of~~ analyzing comprises analyzing said incoming service request contained in said service requests comprising AAA service requests associated with authentication, authorization, and accounting functions.

8. (Currently Amended) A method according to claim 7, wherein said ~~step of~~ analyzing comprises processing said service requests based on a Diameter base protocol.

9. (Currently Amended) A method according to claim 3, wherein said ~~step of~~ analyzing comprises analyzing said incoming service request in said service request input node comprising said entry node of said domain comprising a proxy node.

10. (Currently Amended) A method according to claim 3, wherein said ~~step of~~ analyzing comprises analyzing said incoming service request in said service request input node comprising said entry node of said domain comprising a relay node.

11. (Original) A method according to claim 1, further comprising:
providing a network including a plurality of domains, wherein the network comprises an Internet, and wherein the plurality of domains are established by respective service providers.

12. (Original) A method according to claim 1, further comprising:
providing a network including a plurality of domains, wherein the network comprises a Third Generation mobile communication network.

13. (Original) A system for processing service requests in a domain of a network, wherein the network comprises a plurality of domains, wherein said service requests originate from a user terminal associated with a service node of said domain, and wherein at least one domain of said plurality of domains comprises at least a service request input node, an intermediate node, a database, an entry node, and a plurality of

service nodes, and wherein said service request input node is connected to said intermediate node, to said entry node, and to said service nodes, said intermediate node is further connected to said database and to said service nodes, and said service nodes are further connected to each other; said system comprising:

analyzing means in a service request input node for analyzing an incoming service request in terms of destination information contained in a service request;

determining means in said service request input node for determining, whether the destination information enables a direct forwarding of said service request to a destination;

redirecting control means in said service request input node for controlling a redirecting of said service request, if said determining means determines that said direct forwarding is not enabled; wherein said redirecting is performed by

transmitting means in said service request input node for transmitting a received service request from said service request input node to an intermediate node;

look-up means in said intermediate node for performing, based on said service request received by receiving means, a look-up in a database for obtaining destination information required to enable a forwarding of said service request to said destination;

sending means in said intermediate node for sending said destination information from said intermediate node to said service request input node; and

forwarding means in said service request input node for forwarding said service request, based on said sent destination information, from said service request input node to said destination.

14. (Original) A system according to claim 13, further comprising:

forwarding means in said service request input node for forwarding said service request to said destination, if said determining means determines that said direct forwarding is enabled.

15. (Currently Amended) A system according to claim ~~13~~35, wherein said service request input node comprises an entry node of a domain, and wherein said entry node receives said service request from outside of said domain.

16. (Currently Amended) A system according to claim ~~13~~35, wherein said service request input node comprises a service node of a plurality of service nodes of a domain, with which a user terminal originating said service request is not associated, wherein said one of the plurality of service nodes receives said service request from within said domain.

17. (Currently Amended) A system according to claim ~~16~~3, wherein said service request input node comprises a service node of a plurality of service nodes of a domain, with which a user terminal originating said service request is not associated, wherein said one of the plurality of service nodes receives said service request from within said domain, and wherein said service request input node comprises determining means for determining, whether the received service request from within said domain is

destined for a user terminal associated with said service node of said plurality of service nodes of said domain, and redirecting means for redirecting said service request, if said service request is destined for a user terminal being associated with said service node of said plurality of said domain.

18. (Currently Amended) A system according to claim ~~13~~⁴⁶, wherein said service request input node comprises a service node of a plurality of service nodes of a domain, with which a user terminal originating said service request is not associated, wherein said one of the plurality of service nodes receives said service request from within said domain, and wherein said service request input node comprises determining means for determining, whether the received service request from within said domain is destined for a user terminal not associated with said service node of said plurality of service nodes of said domain, and forwarding means for forwarding said service request to an entry node of said domain for relaying said service request to another domain, if said service request is destined for a user terminal being associated with said service node of said plurality of service nodes of said domain.

19. (Currently Amended) A system according to claim ~~35~~⁴³, wherein said service requests comprise AAA service requests associated with authentication, authorization, and accounting functions.

20. (Original) A system according to claim 19, wherein service requests are processed based on a Diameter base protocol.

21. (Original) A system according to claim 15, wherein said entry node of said domain comprises a proxy node.

22. (Original) A system according to claim 15, wherein said entry node of said domain comprises a relay node.

23. (Currently Amended) A system according to claim 3513,
a network including a plurality of domains comprises an Internet and the plurality of domains are established by respective service providers.

24. (Currently Amended) A system according to claim 3513, further comprising:

a network including a plurality of domains comprises a Third Generation mobile communication network.

25. (Original) An intermediate node for redirecting service requests within a domain of a network, wherein the network comprises a plurality of domains, wherein said intermediate node is connected to an entry node, to a database, and to a plurality of service nodes of said domain; said intermediate node comprising:

receiving means for receiving a service request from a service request input node;

look-up means for performing, based on a received service request, a look-up in a database for obtaining destination information required for forwarding said service request to a destination; and

sending means for sending said destination information from an intermediate node to said service request input node.

26. (Currently Amended) An intermediate node according to claim ~~25~~39, wherein said service requests comprise AAA service requests associated with authentication, authorization, and accounting functions.

27. (Currently Amended) A service node of a domain of a network, wherein the network comprises a plurality of domains, wherein said service node provides services for a user terminal associated with said service node, wherein said services are requested by service requests originating from said user terminal, and wherein said service node is connected to an entry node of said domain, to an intermediate node of said domain which redirects service requests within said domain, and to service nodes of said domain.

28. (Original) A service node according to claim 27, wherein said service requests comprise AAA service requests associated with authentication, authorization, and accounting purposes functions.

29. (Original) A service request input node within a domain of a network, wherein the network comprises of a plurality of domains, wherein said service request input node processes service requests originated from user terminals of said network, and wherein said service request input node is connected to an intermediate node of said domain which redirects service requests within a domain, and to a plurality of service nodes of said domain; said service request input node comprising:

redirecting control means for controlling a redirecting of a received incoming service request;

transmitting means for transmitting said received incoming service request to an intermediate node for obtaining destination information required for forwarding a service request to a destination; and

forwarding means for forwarding said service request, based on said received destination information, from a service request input node to said destination.

30. (Currently Amended) A service request input node according to claim 29 40, wherein said service request input node comprises an entry node of a domain, and receives service requests from outside of said domain.

31. (Currently Amended) A service request input node according to claim 29 40, wherein said service request input node comprises a service node of a domain, and receives service requests from within said domain.

32. (Currently Amended) A service request input node according to claim ~~31~~ 29, wherein said service request input node comprises a service node of a domain, and receives service requests from within said domain, and wherein the service request input node further comprises ~~comprising~~:

determining means for determining, whether the received incoming service request from within said domain is destined for a user terminal associated with said service node of said domain, and redirects said service request, if said service request is destined for a user terminal associated with said service node of said domain.

33. (Original) A service request input node according to claim 29 ~~31~~, wherein said service request input node comprises a service node of a domain, and receives service requests from within said domain, and wherein the service request input node further comprises ~~comprising~~:

determining means for determining, whether the received incoming service request from within said domain is destined for a user terminal not associated with said service node of said domain, and forwarding means for forwarding said service request to an entry node of said domain for relaying said service request to another domain, if said service request is destined for a user terminal not associated with a service node of said domain.

34. (Currently Amended) A service request input node according to claim-29 ~~40~~, wherein said service requests comprise AAA service requests associated with authentication, authorization, and accounting functions.

35. (New) A system for processing service requests in a domain of a network, wherein the network comprises a plurality of domains, wherein said service requests originate from a user terminal associated with a service node of said domain, and wherein at least one domain of said plurality of domains comprises at least a service request input node, an intermediate node, a database, an entry node, and a plurality of service nodes, and wherein said service request input node is connected to said intermediate node, to said entry node, and to said service nodes, said intermediate node is further connected to said database and to said service nodes, and said service nodes are further connected to each other; said system comprising:

an analyzing unit in a service request input node, said analyzing unit configured to analyze an incoming service request in terms of destination information contained in a service request;

a first determining unit in said service request input node, said first determining unit configured to determine, whether the destination information enables a direct forwarding of said service request to a destination;

a redirecting control unit in said service request input node, said redirecting control unit configured to control a redirecting of said service request if said determining unit determines that said direct forwarding is not enabled; wherein said redirecting is performed by:

a transmitting unit in said service request input node, said transmitting unit configured to transmit a received service request from said service request input node to an intermediate node;

a look-up unit in said intermediate node, said look-up unit configured to perform, based on said service request received by a receiving unit, a look-up in a database for obtaining destination information required to enable a forwarding of said service request to said destination;

a sending unit in said intermediate node, said sending unit configured to send said destination information from said intermediate node to said service request input node; and

a first forwarding unit in said service request input node, said forwarding unit configured to forward said service request, based on said sent destination information, from said service request input node to said destination.

36. (New) A system according to claim 35, further comprising:

a second forwarding unit in said service request input node, said forwarding unit configured to forward said service request to said destination, if said determining unit determines that said direct forwarding is enabled.

37. (New) A system according to claim 16, wherein said service request input node comprises a second determining unit configured to determine, whether the received service request from within said domain is destined for a user terminal associated with

said service node of said plurality of service nodes of said domain, and a redirecting unit configured to redirect said service request, if said service request is destined for a user terminal being associated with said service node of said plurality of said domain.

38. (New) A system according to claim 16, wherein said service request input node comprises a third determining unit configured to determine, whether the received service request from within said domain is destined for a user terminal not associated with said service node of said plurality of service nodes of said domain, and a third forwarding unit configured to forward said service request to an entry node of said domain for relaying said service request to another domain, if said service request is destined for a user terminal being associated with said service node of said plurality of service nodes of said domain.

39. (New) An intermediate node for redirecting service requests within a domain of a network, wherein the network comprises a plurality of domains, wherein said intermediate node is connected to an entry node, to a database, and to a plurality of service nodes of said domain; said intermediate node comprising:

receiving unit configured to receive a service request from a service request input node;

look-up unit configured to perform, based on a received service request, a look-up in a database for obtaining destination information required for forwarding said service request to a destination; and

sending unit configured to send said destination information from an intermediate node to said service request input node.

40. (New) A service request input node within a domain of a network, wherein the network comprises of a plurality of domains, wherein said service request input node processes service requests originated from user terminals of said network, and wherein said service request input node is connected to an intermediate node of said domain which redirects service requests within a domain, and to a plurality of service nodes of said domain; said service request input node comprising:

redirecting control unit configured to control a redirecting of a received incoming service request;

transmitting unit configured to transmit said received incoming service request to an intermediate node for obtaining destination information required for forwarding a service request to a destination; and

forwarding unit configured to forwarding said service request, based on said received destination information, from a service request input node to said destination.

41. (New) A service request input node according to claim 31, further comprising:

a determining unit configured to determined whether the received incoming service request from within said domain is destined for a user terminal associated with

said service node of said domain, and redirects said service request, if said service request is destined for a user terminal associated with said service node of said domain.

42. (New) A service request input node according to claim 31, further comprising:

determining unit configured to determine whether the received incoming service request from within said domain is destined for a user terminal not associated with said service node of said domain, and forwarding means for forwarding said service request to an entry node of said domain for relaying said service request to another domain, if said service request is destined for a user terminal not associated with a service node of said domain.

43. (New) A method for processing service requests in a domain of a network, wherein the network comprises a plurality of domains, wherein said service requests originate from a user terminal associated with a service node of said domain, and wherein at least one domain of said plurality of domains comprises at least a service request input node, an intermediate node, a database, an entry node, and a plurality of service nodes, and wherein said service request input node is connected to said intermediate node, to said entry node and to said service nodes, said intermediate node is further connected to said database and to said service nodes, and said service nodes are further connected to each other; said method comprising:

analyzing an incoming service request in a service request input node in terms of destination information contained in a service request;

determining in said service request input node, whether the destination information enables a direct forwarding of said service request to a destination;

redirecting said service request by said service request input node, if said determining determines that said direct forwarding is not enabled; wherein said redirecting comprises

transmitting a received service request by said service request input node to an intermediate node;

receiving destination information from said intermediate node to said service request input node, said destination information required to enable a forwarding of said service request to said destination; and

based on said sent destination information, forwarding said service request from said service request input node to said destination.

44. (New) A method for processing service requests in a domain of a network, wherein the network comprises a plurality of domains, wherein said service requests originate from a user terminal associated with a service node of said domain, and wherein at least one domain of said plurality of domains comprises at least a service request input node, an intermediate node, a database, an entry node, and a plurality of service nodes, and wherein said service request input node is connected to said intermediate node, to said entry node and to said service nodes, said intermediate node is further connected to

said database and to said service nodes, and said service nodes are further connected to each other; said method comprising:

receiving at an intermediate node a received service request from a service request input node, wherein said service request input node analyzes an incoming service request in terms of destination information contained in a service request, determines whether the destination information enables a direct forwarding of said service request to a destination, and redirects said service request as said received service request if said direct forwarding is not enabled;

based on said received service request, performing a look-up in a database by said intermediate node for obtaining destination information required to enable a forwarding of said service request to said destination; and

sending said destination information from said intermediate node to said service request input node to enable said service request input node, based on said sent destination information, to forward said service request from said service request input node to said destination.